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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,772	02/06/2004	Martin Michaelis	DEA V2003/0008 US NP	7891

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ROSS J. OEHLER
SANOFI-AVENTIS U.S. LLC
1041 ROUTE 202-206
MAIL CODE: D303A
BRIDGEWATER, NJ 08807

EXAMINER	
CORDERO GARCIA, MARCELA M	
ART UNIT	**PAPER NUMBER**
1654	

NOTIFICATION DATE	DELIVERY MODE
07/02/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USPatent.E-Filing@sanofi-aventis.com
andrea.ryan@sanofi-aventis.com

Office Action Summary	Application No.	Applicant(s)	
	10/773,772	MICHAELIS ET AL.	
	Examiner	Art Unit	
	Marcela M. Cordero Garcia	1654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 April 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5 and 7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5 and 7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claims 1-5 and 7 are pending in the application.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 18, 2007 has been entered.

Applicant has amended the claims to now read upon treating a degenerative joint disease which includes matrix degradation, in a patient in need thereof, said degenerative joint disease being selected from the group consisting of osteoarthrosis, spondyloses and cartilage atrophy, the method comprising inhibiting matrix degradation.

Any rejection from the previous office action, which is not restated here, is withdrawn.

Claims 1-5 and 7 are presented for examination on the merits as they read upon the elected species, i.e., D-arginyl-L-arginyl-L-prolyl-L-prolylglycyl-3-(2-thienyl)-L-alanyl-L-seryl-(3R)-1,2,3,4-tetrahydro-3-isoquinolinecarbonyl-(2S,3aS,7aS)-octahydro-1H-indole-2-carbonyl-L-arginine [i.e.,D-Arg-L-Arg-L-Pro-L-Pro-Gly-Thia-Ser-(3R)-1,2,3,4-

tetrahydro-3-isoquinolinecarbonyl-(2S,3aS,7aS)-octahydro-1H-indole-2-carbonyl-L-Arg]. Please note the following abbreviations and their corresponding equivalents: Thia = 2-thienylalanyl; Tic = 1,2,3,4-tetrahydroisoquinolin-3-yl carbonyl, and Oic = octahydro-1H-indole-2-carbonyl.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-5 and 7 are rejected under 35 U.S.C. 103(a) as obvious over Nestor et al. (EP 0472 220, cited in the IDS of 02/04) in view of Henke et al. (US 5,648,333, cited in IDS of 02/04)

Nestor et al. (EP 0472 220) teach bradykinin antagonists for treating trauma or a pathological condition induced or mediated by bradykinin, in particular wherein the

condition to be treated is a joint degenerative disease such as osteoarthritis (i.e., osteoarthrosis) or rheumatoid arthritis. (e.g., claim 26). The compounds taught by Nestor et al. encompass, within the preferred embodiments, the compound H-(D)-Arg-Arg-Pro-Pro-Gly-Thia-(L)-Ser-(D)-Tic-Oic-Arg-OH (e.g., claims 1-2 wherein A is H, B= D-Arg, C is Gly, Tis Arg, E is Pro, F is Thi (i.e., Thia), G is Ser, I is D-Tic, J is Oic, K is Arg). Nestor et al. teach that bradykinin promotes matrix degradation (e.g., page 2, lines 30-36 and lines 52-54). The limitation of claim 7 is taught, e.g., at page 10, lines 10-58.

Nestor et al. do not teach the specific species H-(D)-Arg-Arg-Pro-Pro-Gly-Thia-Ser-(D)-Tic-Oic-Arg-OH except as within the preferred embodiments (as embodied by claim 2 of Nestor et al.)

Henke et al. teaches the specific compound H-(D)-Arg-Arg-Pro-Pro-Gly-Thia-Ser-(D)-Tic-Oic-Arg-OH (see, e.g., Example 60 and column 17, lines 10-18 and 25-67, claims 1, 12, and especially 27-28 and 30) for the treatment of all pathological states which are mediated, caused or supported by bradykinin and bradykinin-related peptides including arthritis and inflammation (e.g., abstract, column 17, lines 10-17). The limitation of claim 7 is taught, e.g., at column 17, lines 25-67.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of treating osteoarthrosis Nestor et al. by using the specific compound H-(D)-Arg-Arg-Pro-Pro-Gly-Thia-Ser-(D)-Tic-Oic-Arg-OH taught by Henke et al. The skilled artisan would have been motivated to do so because Henke et al. and Nestor et al. teach that the compound and family of related

compounds treat pathological states which are mediated, caused or supported by bradykinin and bradykinin-related peptides. There would have been a reasonable expectation of success, given that the species H-(D)-Arg-Arg-Pro-Pro-Gly-Thia-Ser-(D)-Tic-Oic-Arg-OH was encompassed within the preferred embodiments of Nestor et al. to treat degenerative diseases such as osteoarthritis (e.g., claims 2 and 26 of Nestor et al.) and was known to be effective to treat arthritis as taught by Henke et al. Please note that the method taught by Nestor et al. in view of Henke et al. necessarily reads upon the limitation "comprising inhibiting matrix degradation" since the method taught anticipates all the instantly claimed steps of the present invention. The limitation of claim 7 is taught, e.g., at column 17, lines 25-67 of Henke et al. and page 10, lines 10-58.

Thus the invention as a whole was clearly prima facie obvious to one of ordinary skill in the art at the time the invention was made.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-5 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 27-28 and 30 of U.S. Patent No. 5,648,333 (cited in IDS of 02/04) in view of Nestor et al. (EP 0472 220, cited in the IDS 02/04).

Henke et al. teach the specific compound H-(D)-Arg-Arg-Pro-Pro-Gly-Thia-Ser-(D)-Tic-Oic-Arg-OH (claims 1, 12, and especially 27-28 and 30) for the treatment of all pathological states which are mediated, caused or supported by bradykinin and bradykinin-related peptides including arthritis and inflammation.

Nestor et al. bradykinin antagonists for treating trauma or a pathological condition induced or mediated by bradykinin, in particular wherein the condition to be treated is a joint degenerative disease such as osteoarthritis (i.e., osteoarthrosis) or rheumatoid arthritis. (e.g., claim 26). The compounds taught by Nestor et al. encompass, within the preferred embodiments, the compound H-(D)-Arg-Arg-Pro-Pro-Gly-Thia-Ser-(D)-Tic-Oic-Arg-OH (e.g., claims 1-2 wherein A is H, B= D-Arg, C is Gly, Tis Arg, E is Pro, F is Thi (a.k.a. Thia), G is Ser, I is D-Tic, J is Oic, K is Arg).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Henke et al. by treating the specific type of arthritis known as osteoarthritis as taught by Nestor et al. The skilled artisan would have been motivated to do so because Nestor et al. teach preferred compounds comprising the formula H-(D)-Arg-Arg-Pro-Pro-Gly-Thia-Ser-(D)-Tic-Oic-Arg-OH to treat

bradykinin mediated osteoarthritis. There would have been a reasonable expectation of success, given that both Henke et al. and Nestor et al. teach treating pathological conditions induced or mediated by bradykinin with the same compound. Thus the invention as a whole was clearly prima facie obvious to one of ordinary skill in the art at the time the invention was made.

Conclusion

No claim is allowed.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcela M. Cordero Garcia whose telephone number is (571) 272-2939. The examiner can normally be reached on M-Th 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cecilia J. Tsang can be reached on (571) 272-0562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Marcela M Cordero García
Patent Examiner
Art Unit 1654

05/07 MMCG

6/25/09
ANISH GUPTA
PRIMARY EXAMINER